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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,835	04/18/2006	Tor H. Johannessen	HAMSO29.001APC	4271
20995 7590 01/23/2008 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER DEBOER, JOHN M	
			ART UNIT 4112	PAPER NUMBER
			NOTIFICATION DATE 01/23/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/541,835	Applicant(s) JOHANNESSEN, TOR H.	
	Examiner JOHN M. DEBOER	Art Unit 4112	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/09/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements:

a) "a safe distance"

b) "under water"

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:
 - a) the meaning of the phrase “a safe distance” cannot be discerned
 - b) “underwater” is claimed in claims 3 and 4, but is not disclosed within the specification.Appropriate correction is required.

Claim Objections

1. Claims 1-4 are objected to because of the following informalities:
 - a) “the annuli” lacks antecedent basis
 - b) applicant should be consistent in using the term annuli or annulus because the terms have different meanings known in the art

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
3. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a method of “drilling into tubulars” and “reducing drilling time,” does not reasonably provide enablement for “A method for a drilling device...” The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to perform the method of using the

device of claim 1. Applicant should ensure the claims did not lose any meaning upon any performed translation of language.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

7. The terms "preferably," "characterized" and "a safe distance" in claims 1-4 are relative terms which render the claims indefinite. The terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dressel, US Patent 4,271,914 (“914” or “Dressel”).

The gist of applicant’s claim 1 as understood by the examiner is a method for a drilling device that changes speeds of a drill bit as the bit works through tubulars of different materials (or the different materials in the tubulars), where the speed is controlled by a valve within a hydraulic circuit.

Examiner notes for method claims if a prior art device or apparatus, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered anticipated by the prior art device or apparatus. In this instance, examiner reasonably believes the method claims 1-2 pertain to the normal and usual operation of applicant’s device claimed (claims 3-4).

The device of Dressel uses a hydraulic circuit for automatically controlling the thrust and speed of the drill as it proceeds through different materials (col. 5, 33-50). In particular, the circuit in Dressel contains needle valve 16, which is “an [element] within a specific control system to perform specific automatic control functions...related to the drillability of the material being drilled [having varying drillability characteristics (col. 3, 8-20).”

Claim 1 further states, “a first means...to [decrease] rotational speed...and **vice versa**, said first means including a needle valve... (col. 6, 15-22).”

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While Dressel does not specifically teach the use of the hydraulic circuit for drilling “tubulars” comprising different materials, its very nature is for use when drilling through materials with varying drillability characteristics. It would be obvious to a person of ordinary skill in the art at the time of the invention that materials with varying drillability characteristics could be tubular in nature. It is desirous to have a drill operate at different speeds because it increases the life of a drill bit (see Dressel, ‘Field of the invention’). When the lifespan of a drill bit is increased, the drilling operation can proceed for greater length of time. Drill bit replacement is costly because of the material costs, as well as the time involved in stopping the drilling operations.

Claim 2 is rejected because the method further entails “opening [the] valve which is located at a safe distance” infers all other valves are **not** opened at a safe distance. While Dressel does not specifically claim opening valve 16 at a safe distance from the vessel, it would be obvious to a person of ordinary skill at the time of the invention to open a valve at a safe distance because to not do so would infer it is an **unsafe** distance. It is desirous to open a valve at a safe distance from a device because this promotes safety and wellbeing for operations personnel. In further regard to the meaning of claim 2, applicant is also directed to 112, 2nd rejection presented previously (see above).

10. The prior art made of record and **not** relied upon but considered pertinent to applicant's disclosure:

- 1) Keating, et al., US Patent 5,564,455
- 2) Snyder, US Patent 3,903,697
- 3) Schultz, US Patent 4,198,180
- 4) Allarie, et al., US Patent 6,167,968
- 5) Salwasser, et al., EP 0.791.722 A1
- 6) Collins, Jr., US Patent 4,226,288
- 7) Konig, DE 199.24.200

The references mentioned above are deemed useful for background information as applicable to understanding applicant's invention (NOTE: not all sources may be prior art as per 102, nor would they be used for such a purpose).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOHN M. DEBOER whose telephone number is (571)270-3652. The examiner can normally be reached on M-Thur, alt. Friday (7:30 - 5:00 est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bruce can be reached on 571-272-2487. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John M. DeBoer
Examiner
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